



# Prescribed Fire

## *Management Ignited Fire*

Fire in the chaparral environment of our Mediterranean biome has always been a natural force. Because of the National Park Service's mission to promote conservation, from 1916 to 1968, the national policy was to suppress all fires. Officially, all fires were considered wildfires and were "put out" as quickly as possible. This practice showed an increase in the amounts of fuel (vegetation) built up in natural areas. In the event of any fires, this increased amount of fuel ensured a more intense fire, and more severe damage. In the 1950s, Everglades National Park researched the use of prescribed fire. As a response to that report, the National Park Service dramatically changed its fire management policy in 1968. The use of prescribed fire was accepted as a way to reduce fuel build up.

**Prescribed fire** is the controlled use of fire to reduce excess fuel and promote the overall health of an ecosystem. It is used in a specific area of the land under predetermined conditions — it is a calculated and carefully planned event. To plan and prepare for a prescribed fire, fire managers construct a Burn Plan that considers: wind conditions; weather; season; humidity; and fuel among others. Fire managers determine how hot the fire will burn and in what direction it will travel. Part of the Burn Plan includes determining where each member of the crew will be stationed to ensure the fire is managed and the crew is safe. Also, emergency procedures are outlined to handle a fire that has gotten out of control. The following are some of the guidelines for a well-planned prescribed fire:

### **Coordination**

Agencies and land owners within the areas of the prescribed fire must be in agreement on the area to be burned and the methods used. The overall Burn Plan must be reviewed by all appropriate management officers and receive approval.

### **Firebreaks**

To decrease the risk of a fire escaping the planned burn area, fire breaks must be constructed. They are barriers around the planned burn area and can include roads, ditches, water, or other physical features that have no vegetation. Sometimes firebreaks are built ahead of time.



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## Wind & Weather

Long-term drought conditions, and current wind and weather forecasts must be considered continually. Wind speed and wind direction will determine where the fire will be ignited and in which direction it will burn. All possibilities are considered. If the conditions are not ideal, the burn must be delayed.

## Backfire and Headfire

Fire crews light a headfire at the top of a slope along a firebreak. Then, a backfire at the base of the slope is ignited downwind along another fire break. The fires slowly burn toward the center of the site where, eventually, the backfire meets the headfire and they burn each other out. Fuel types and elevation variations must be considered when deciding where fires will be ignited.

## Hand Line

Hand lines are created by ground crews who work to contain the fire to the sides of the site. Breaks are created along the sides using hand tools such as chain saws, shovels, and rakes. A "hose lay" is run along the hand line with pumps full of water ready to be used to maintain the hand line. Other crew members and a fire engine are nearby if the prescribed fire should get out of control.

Finally, fire crews complete the prescribed fire by extinguishing smoldering remains. In a matter of days, the black, lifeless area will slowly come back to life as dormant seeds sprout and other fire-resistant plants begin the process of regeneration.